Management of blunt splenic injury in adults 16 years of age or older and in children less than 16 years of age

Summary of recommendations

Pediatric

All recommendations are newly drafted by the Pediatric Trauma Specialist Advisory Group (SAG), unless indicated otherwise.

I. INITIAL ASSESSMENT AND MANAGEMENT

- A. Initial resuscitation and management of the pediatric patient with blunt abdominal trauma should follow the Advanced Trauma Life Support® (ATLS®) principles.
- **B.** In centres with surgical capability, the on-call general surgeon should be consulted promptly when a splenic injury is suspected or proven.
- **C.** In a pediatric patient, initial resuscitation and management of the patient with blunt abdominal trauma and possible splenic injury should follow the BC children's algorithm: Fluid Resuscitation in the Pediatric Trauma Patient.

II. OPERATIVE MANAGEMENT

- **A.** In centres with general surgical capability, urgent splenectomy should be performed for a hemodynamically unstable pediatric patient with a splenic injury who is not responding to appropriate resuscitation.
- **B.** Grade or severity of splenic injury is not, in and of itself, an indication for surgical management of the injured spleen. The decision to proceed to splenectomy should be based on the clinical presentation of the patient and situational context, which includes the capabilities of the site, resources available, presence of other injuries, transport availability, and transfer related issues.
- C. A pediatric surgeon should be involved in decision-making for suspected or proven splenic injury in a pediatric patient. Consideration should be given to transferring the patient to the BC Children's Hospital depending on the patient's age and stability.

III. NON-OPERATIVE MANAGEMENT

A. No pediatric-specific recommendations offered.

IV. ANGIOGRAPHY/ANGIOEMBOLIZATION

A. Emergent angiography/angioembolization may be indicated in the pediatric patient that demonstrates contrast extravasation on CT scan and evidence of ongoing hemorrhage.

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V. TRANSFER TO HIGHER LEVEL OF CARE (HLOC)

Immediate Transfer (< 24 hours):

A No pediatric-specific recommendations offered.

Delayed Transfer (> 24 hours):

B. Consideration should be given to transferring a pediatric patient to the BC Children's Hospital through the Patient Transfer Network (PTN).

VI. ACUTE HOSPITAL CARE

- **A.** In the pediatric population, repeat cross-sectional imaging is only indicated to evaluate a change in clinical status.
- **B.** In the pediatric population, bed rest should be limited to 1 day for low risk injuries (Grade 1 to 2) and 2 days for high risk injuries (Grade 3 to 5).
- **C.** In the pediatric population, patients should avoid physical activity for a total duration of grade + two weeks.

VII. VENOUS THROMBOEMBOLISM (VTE) PROPHYLAXIS

A. VTE prophylaxis is not indicated in the pediatric population.

VIII. OVERWHELMING POST SPLENECTOMY INFECTION (OPSI) PROPHYLAXIS

A. No pediatric-specific recommendations offered.

IX. POST HOSPITAL CARE

A. In the pediatric population, routine follow-up imaging for asymptomatic, uncomplicated, low risk (Grade 1 to 2) injuries in children is not indicated. Screening for pseudoaneurysm should be considered for high risk injuries (Grade 3 to 5).

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